UNHCR
The UN Refugee Agency

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item N**o SH-TE-10028**

UNHCR Environmentally Friendly Procurement

DOCUMENT VERSION

This is the first version of this item with enhanced sustainability attributes, representing UNHCR's ongoing commitment to advancing the environmental, technical, social and economic sustainability of relief items, as of **February 19, 2025**. **This version of technical specification pertains to Family Tent without UNHCR logos.**

FAMILY TENT, ECO-DESIGN, WITHOUT UNHCR LOGOS

Providing material assistance to forcibly displaced populations is fundamental to UNHCR's protection mandate. In an emergency, Family Tents are one of the main essential items that UNHCR distributes as part of the assistance to the affected populations. Family Tents are used for providing temporary shelter to families.

END USERS

UNHCR is mandated to protect and assist refugees, forcibly displaced communities, and stateless people. The product with this specification will be used by the people we serve, primarily in emergencies. The end users include individuals of all ages, ranging from infants to older persons, persons with disabilities and pregnant women. Therefore, the supplier needs to understand and study the needs of forcibly displaced populations, especially in emergencies, to ensure an innovative and sustainable product design that is user-centered.

SUSTAINABLE SUPPLY CHAIN

For UNHCR to fulfill its mandate, it is imperative to minimize the environmental footprint of humanitarian assistance. Our approach to a sustainable end-to-end supply chain includes planning, sourcing, material selection, manufacturing processes, procurement, delivery, and lifecycle management of goods.

A holistic assessment of sustainable products includes but is not limited to, the following criteria:

- The product design adheres to Universal Design principles, ensuring user-friendliness and accessibility.
- Manufacturing processes take into consideration the protection of the environment and respect for social standards[1].
- Products are made from sustainable materials, including materials from Post-Consumer Waste Recycling (PCR) and/or Post-Industrial Waste Recycling (PIR)[2].
- Packaging is made from sustainable material, ideally with a second-life purpose.
- All unnecessary single-use plastic[3] is removed.
- Packaging, palletizing and transport unit load-ability are optimized for efficiency.
- Products are designed to be recyclable.
- A life cycle analysis, including GHG emission factors, is performed for all products.
- Supplier bases are diversified geographically to facilitate proximity in product delivery.

PREFERENCE

Preference will be given to a product that is most user-friendly and incorporates the highest overall sustainability elements that satisfy the technical specification. Please refer to the Sustainability Procurement Indicators from the United Nations Global Market, which UNHCR adheres to.

1 Suppliers to demonstrate the application of ISO 14001:2015: Environmental managing systems, ISO 9001:2015: Quality Management systems, ISO 26000: Guidance on social responsibility

2 Pre-consumer waste is encouraged to be used while cannot be considered part of the target emission reduction.

3 https://www.unep.org/resources/report/single-use-plastics-roadmap-sustainability

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Item Application Sample

General Information and Description

The main floor area of a Family Tent is 16 m^2, plus two vestibules 3.5 m^2 each. A total floor area of a Family Tent is 23 m^2.

It is the standard tent used by UNHCR suitable for a family of 5 people, following the recommended minimum living area in hot climate (3.5 m^2 per person), and providing additional space for cold climates.
The technical specification of this tent is generic, ensuring that the product can be manufactured by different suppliers in various countries, with the common technical know-how and standard equipment from the tent industry.

UNHCR procures family tents through international tenders and enters into Framework Agreements (FAs) with manufacturers who have completed the validation / qualification of Family Tent samples in one of the UNHCR approved laboratories. Family Tents are subject to random and continuous quality control throughout the duration of the FA.

For validation/qualification of Family Tent samples, it is recommended to first ensure that the main material specifications are met. Information on approved technical laboratories can be obtained from the UNHCR Supply Management Service in Budapest.

Family Tents should comply with all the technical requirements, criteria, and parameters described in this document.

Information for laboratory testing: To complete validation/ qualification of Family Tents, two (02) complete samples are sent to one of the UNHCR approved laboratories for testing and make up checking. One sample will be used for material testing and the second for a rain test. A product is acceptable only if all criteria are passed on the same sample.

Weight and Volume

Gross weight per unit: approx. 49-53 kg
Gross volume per unit: approx. 0.23-0.25 m^3

Repair Kit

Should include 1 needle, 20 m stitching thread, 3 m polyester rope, or string of 3 mm.

Shelf life and Lifespan

Shelf life: The shelf life of the Family Tent is at least **5 years** under normal storage conditions in dry, clean, and ventilated warehouses. Tents should be elevated off the ground, not piled up, stored on pallets and pallet racks, not in containers or in tented warehouses.

Lifespan: Family tents should have a lifespan of at least **3 years** and should retain their sheltering and waterproofing properties in all climatic conditions.

Manufacturer's Marking

Every tent should have a manufacturer's marking printed on a strong tag of 5x5 cm with durable print, and stitched inside the tent, in the vertical seam of one tent corner. Please refer to the reference drawings for graphic details. Manufacturer's marking typically includes the following information:

- Manufacturer's name
- Unique reference batch number
- Date of manufacturing (month and year)
- Recycling identification symbol and resin code(as per ASTM International Resin Identification Coding System (RIC) used in the Family Tent (both LDPE and HDPE)
- "Do not burn" sign

Supplier's and manufacturer's logos are prohibited.
The final marking on the tag, letter size, and design must be approved by UNHCR before production.

Reference Drawing for the Manufacturer's Marking

Assembling Instructions and Content List

The contents list and installation/assembly instruction sheet written in English is enclosed in the accessory bag. The contents list and set-up/assembly instructions should be printed on unlaminated A4 paper (use of recycled paper is encouraged), with step-by-step drawings/photos and instructions on how to set up the tent. The content list and installation instructions should be printed in black and white color.

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Primary packaging

One tent with all the accessories can be packed in a master bundle. The outer shell and the inner tent are folded so that the groundsheet protects the tent and accessories from dirt and moisture. The main pack is made of the same material as the tent (woven HDPE laminated with LDPE coating) with a density of 170 g/m^2. The maximum overall length should not exceed 2300 mm with an approximate diameter of 300 mm to allow extra space to facilitate repacking.

The metal poles and metal pegs are packed in 2 separate bags so as not to damage other items in the main bag. Both bags are made of the same material as the tent (woven HDPE laminated with LDPE coating). These bags have a closure system to ensure that the accessories do not fall out of the bag during transport and handling. Special care should be taken when packing the pegs so that they do not pierce the bag. The metal poles and pegs should not be packed individually (e.g. should not be individually wrapped in plastic).

The master bundle is closed with 2 webbing straps on the outside, and each strap has a self-locking buckle that will not slide during transport. Each self-locking buckle can be made either with two rectangular buckles of 4 mm wire, welded-closed, or with one rectangular buckle and one sliding middle bar, of 4 mm steel rod, welded-closed. Each strap has 2 handles (PE or polyester). These straps are not sewn to the bundle. The use of recycled materials for packaging is encouraged.

The international standard warning sign “protect from water” should be printed on the outside of the package.

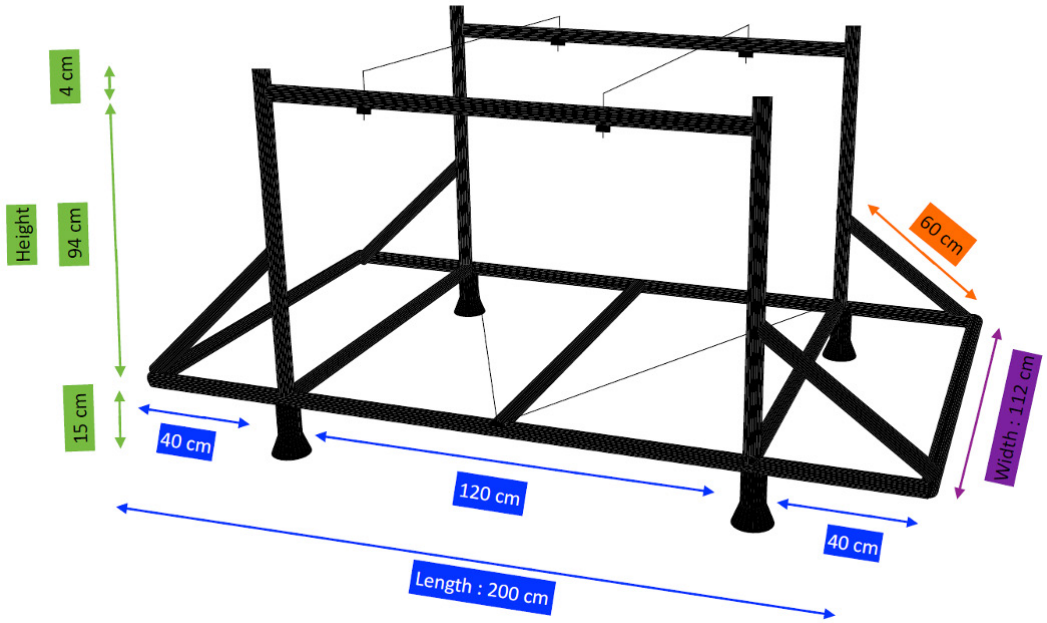
Secondary packaging

No secondary packaging is required.

Tertiary packaging

Tents should be packed on pallets.

It is advisable to use stackable metal frame pallets. Such pallets avoid multiple manual handling of the bags and prevent the bags from being torn, and provides easy and fast on and off loading of containers, trucks, etc. Assures ventilation between the tents while stored in hot and humid climates which are required for long duration storage. The metal cage pallet is protected against corrosion, stackable and adapted to optimize the container capacity. The picture below is given for reference only.



Optimal Shipping / Container Information

When preparing the shipment, consider the maximum capacity of each transport unit. Provide the maximum number of items that can fit in each transport unit, along with the container layout plan.

The following container types are applicable for products supplied to UNHCR:

20’ DC container (without pallets)
40’ DC container (without pallets)
40’ HC container (without pallets)
20’ DC container (with pallets)
40’ DC container (with pallets)
40’ HC container (with pallets)

The final number of transport units and maximum loaded pallet height, if palletized, will be specified in the purchase order.

Shipping Mark

Number of pieces and PO number. Supplier’s and manufacturer’s logos are prohibited. The marking must remain readable and securely fixed on the package after a minimum of 10 handlings. Additional markings specified in the contract/PO are also required.

Marking techniques

- Laser engraving
- Printing with water-based ink
- Printing on sustainable sticky tapes
- Silk screen
- No harmful ink/colouring should be used

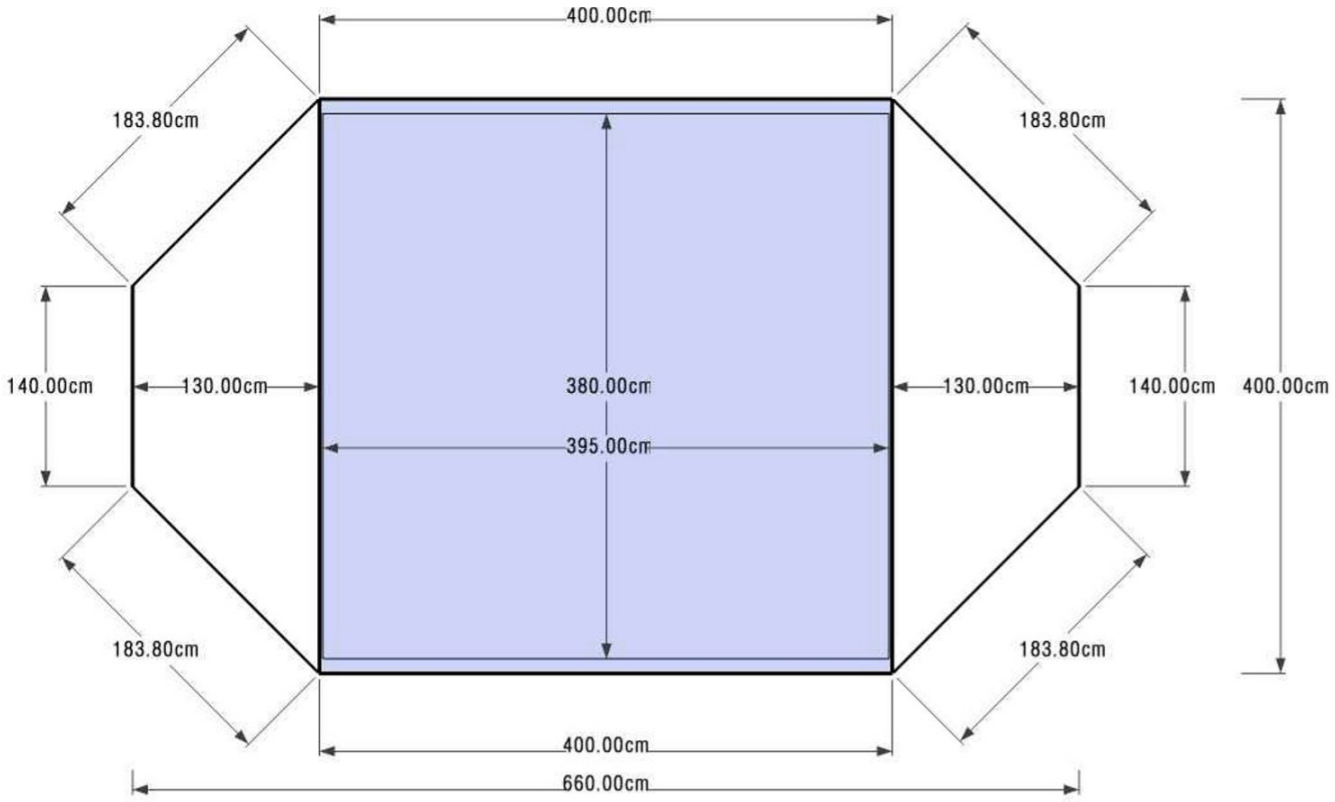
UNHCR
The UN Refugee Agency

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Family Tent General View



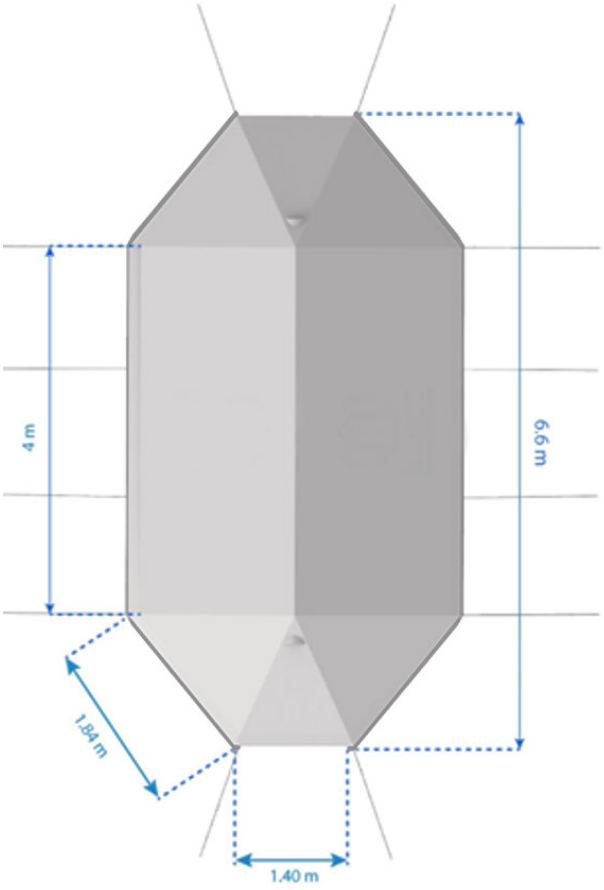
UNHCR
The UN Refugee Agency

FAMILY TENT

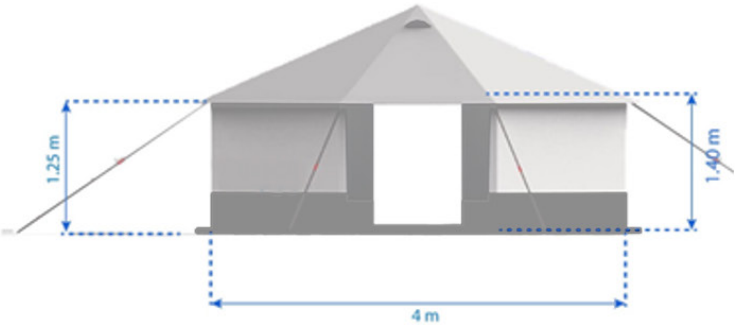
eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

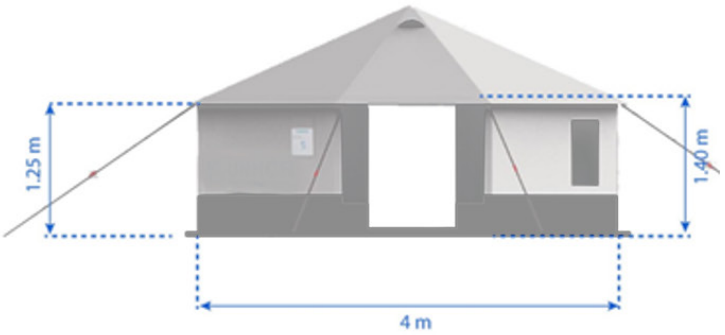
Graphic Reference



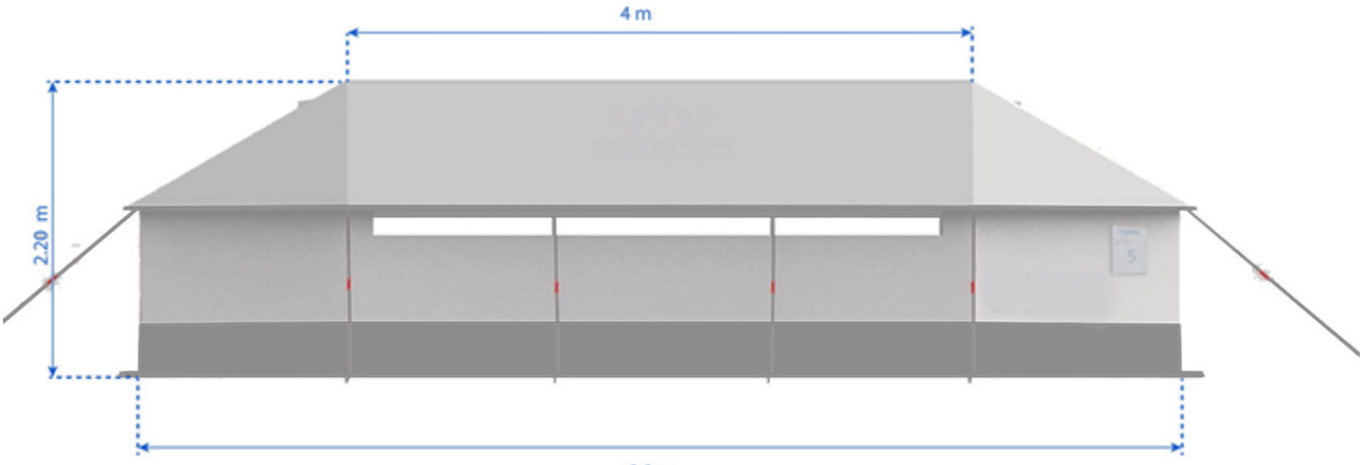
Top View



Back View



Front View



Side View

UNHCR
The UN Refugee Agency

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Technical Specifications

The specifications of the Family Tent, Eco Design are described below according to technical and performance requirements in five parts as follows:

1. **General points for the finished product**
2. **Materials**
3. **Make-up of the outer tent**
4. **Make-up of the inner tent with the ground sheet**
5. **Poles and accessories**

1. GENERAL POINTS FOR THE FINISHED PRODUCT	
1.1 Product performance	The assembled Family Tent is able to withstand wind speeds of 75 km/h, be firmly attached to the ground, and tensioned without any damages. When closed, the tent must give good protection against dust, wind, rain, snow, insects, and small crawling fauna. Reinforcement bands, which enhance second life use of the PE fabric, can be added to the roof panel. Minimum roof load is 300 N/m^2 under ISO8937 (snow load for camping tent). The recommended final packed tent weight is approximately 49-53 kg.
1.2 Seams and stitching	All seams subject to possible tension should be welded or stitched with a double lock or double-row waterproof weave. If welded, seam tensile strength crosswise at the place of the welding under ISO 1421-1, must be minimum 50% of the original value of the actual product. If necessary, seams can be taped with waterproof tape on the inside. Stitching must provide strong durable, and waterproof seams. The number of stitches as well as UV and rot-proof sewing threads should be appropriate and match the fabric. Stitching should provide strong, waterproof seams that should last at least as long as the life of the tent. Seams should be orientated to facilitate unobstructed rain run-off: avoid the formation of water lines or water pockets. If possible, the color of the sewing thread should match the color of the fabric.
1.3 Ropes, webbing bands, toggles, loops, reinforcement nettings, and all other accessories	All ropes and webbing bands are heat cut. All ropes are knotted to the tent from the factory. All the above-mentioned items are rot-proof and UV-proof. No webbing or rope is sewn through a stitch going from outside the tent to inside the tent to avoid water penetration by capillarity. Webbing and rope should be made of waterproof materials.
1.4 Zipper fasteners	All the zipper fasteners should conform to a resistance of 700 N lateral traction under ISO5912.
1.5 Eyelets	All metal eyelets should be rustproof and correctly placed, reinforced with a fabric patch, and of a minimum 10 mm inner diameter.
1.6 Metal rings	All metal rings should be rustproof galvanized and closed by welding.
1.7 Dimensional tolerance	Unless otherwise specified, a tolerance of maximum ±3% is accepted on all dimensions.
2. MATERIALS	
2.1 Specification for the outer tent roof, outer tent wall, mud flaps, and ground sheet material	
Material composition	Woven high-density polyethylene (HDPE) black fibres fabric, laminated on both sides with a white low-density polyethylene (LDPE) coating. Made of a mixture of virgin and recycled* PE. The minimum target for recycled PE content in the product is 15%, although a higher or lower percentage will also be considered. Preference will be given to the product containing the highest proportion of recycled PE, particularly from Post-Consumer Waste Recycling sources, provided they meet the requisite quality and usability standards. Recycled materials should be from GRS-certified (or equivalent) sources. *Recycled PE can originate from both Post-Consumer Waste Recycling (PCR) and Post-Industrial Waste Recycling (PIR). While the use of both PCR and PIR is encouraged, PCR is the preferred source. Recycled plastic should be certified as originating from a legitimate source. The internal recycling of raw materials within the factory, while encouraged, does not qualify as recycled PE.*
Manufacturing quality	The woven base as well as the coating are homogeneous. The black fibres are straight in warp and weft, covering the entire surface of the tarpaulin. In a measuring 6 meters in length, there should not be more than one spot with a missing fibre or with a 5 mm gap between fibres.
Specific weight	170 g/m^2 ± 10 g under ISO 3801 (equivalent to 160 g/m^2 minimum to 180g/m^2 maximum)
Samples for tensile and tear tests	Cut all test pieces parallel to the direction of the fibres, in warp and weft. The fibres should run from one end to the other end of the test piece.
Tear strength at state of origin ISO 4674 Annex B	Minimum 150 N under ISO 4674-1B 2003, with a test piece of 200 x 200 mm as described in ISO 4674 Annex B
Tensile strength at state of origin ISO 1421-1	Minimum 750 N and 15% to 35% elongation in warp and weft under ISO 1421-1.
UV resistance ASTM G53, ISO 1421-1	Apply 1500 hours UV under ASTM G53/94 (UVB 313 nm peak). Maximum 5% loss of strength compared to the original tensile strength of the product.

UNHCR
The UN Refugee Agency

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

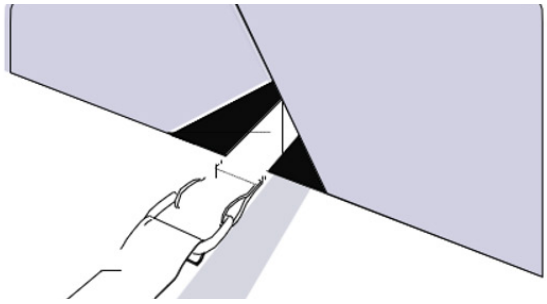
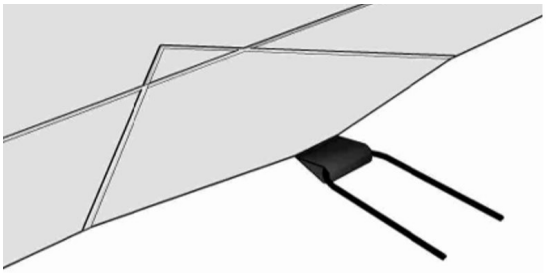
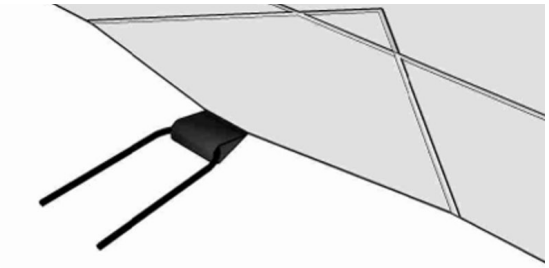
Cut resistance EN 388-6.2	Minimum index 2.5. Test two test pieces from one sample
Flame resistance EN 13823+A1	Minimum class D, s2, d2. Minimum time to reach large wing external edge: 4 minutes (LFS) The presence of Flame Retardant (FR) additives (bromine, antimony) is not permitted.
Resistance to micro-organisms	Insensitive to micro-organisms. Not to be tested.
Resistance to fungi	Insensitive to fungi. Not to be tested.
Water penetration resistance, ISO 811	30hPa minimum, increasing speed at 100mm per minute **The test pieces include seams. Seams tapes are positioned on the inner face of the tent (opposite to the water)**
Efficiency of waterproofing tape after UV and moisturizing	Exposure in a climatic chamber under ISO4892-2, type A, 360 hours. Expose the outer side of the tent to the UV. The test pieces include seams. Seams tapes are positioned on the inner face of the tent (opposite to the UV and to the water) **30hPa minimum, increasing speed at 100mm per minute.**
Strength and UV resistance of the seams	Tensile strength at state of origin under ISO1421-2 (grab test)_1998. UV resistance measured as remaining tensile strength after UV exposure. Tested with ISO1421-1 after exposure in a climatic chamber under ISO4892-2, type A, 360 hours. Expose the outer side of the tent to the UV. **The test pieces are cut with the seams to be in the centre of the pulling area, in a perpendicular position with the pulling forces.** **At state of origin: 500N on fringed samples of 100mm width using clamping jaws of 50mm width.** **After UV exposure: Maximum 5% loss of strength compared to the original tensile strength of the actual product.**
Rain penetration resistance, ISO 5912:2003 (attention: ISO 5912:2011 does not apply)	**Outer tent:** There should be no more than 10 drops of water in maximum 2 places, penetrating inside the outer tent, including through wick effect. Only the 4 places at the top of the door poles may have some leakages through the eyelets. **Inner tent:** There should be no water penetrating inside the inner tent or wetting the inner tent canvas. Apply procedure as per point 4.2.11 in ISO 5912:2003 in point 5.6 plus following: a visual control from the inside of the tent, while the artificial rain is on, is done after 2h and 5h, with the complete tent. The test operator should ensure that the setup of the test will not create condensation inside the tent that could be interpreted as leakages. **Test piece is the complete tent.**
Color ISO 105J01	Inner black fibres to ensure opacity. White coating on both sides of the sheet as per: L.a.b Coordinates: minimum "L": 82 "a" value between -1.7 and +1.5 "b" value between -4.5 and 0
Opacity measured as minimum reflection and maximum transmission, in the range of visible light and near-infrared. ISO 13468-1	Values should be measured respectively within the wavelength ranges of 350 to 750 nm, and 750 to 2500nm. The result is the average of the averages within each range. Minimum total reflection: 35% Maximum total reflection: 55% Maximum total transmission: 5% Absorption: remaining balance to reach 100%

2.2 Specification for the inner tent

Material composition ISO1833	**Option 1**: 100% Polyester, containing a minimum of 40% recycled polyester in the material composition. Preference will be given to the product containing the highest proportion of recycled polyester, particularly from Post-Consumer Waste Recycling sources, provided they meet the required quality and usability standards. Recycled materials should be from GRS-certified (or equivalent) sources. Options that enhance user comfort are preferred (e.g. spun fibers). **Option 2**: Polycotton (cotton: 40%(±10), polyester: 60%(±10)) can be used for the inner tent. In this case, the use of recycled polyester and recycled cotton is encouraged. Polycotton fabric should be treated with environmentally friendly FR chemicals (non-bromine, non-antimony).
Specific weight	120-140 g/m^2
Color	White, beige, or cream
Tensile strength, ISO 13934-1	Warp and Weft 300 N minimum.
Tear resistance, ISO 9073-4	Warp and Weft 20 N minimum
Resistance to micro-organisms (for polyester)	Option 1 is insensitive to micro-organisms. Not to be tested
Resistance to micro-organisms (for polycotton only)	Tensile strength resistance after exposure to micro-organisms under ISO 13934-1 after BS6085 (soil burial - 14 days). Apply on 10 test pieces of plain canvas. 30% maximum strength-loss on minimum required value and 50% maximum strength-loss on original value of the same product. 5 test pieces in warp direction, 5 test pieces in weft.

Flame resistance CPAI-84	Pass CPAI84, section 5 and 6 with maximum 10 s after flame average, and maximum 30s after flame average and maximum 30s after flame per test piece. Ageing under ISO 4892-2, type A, 360 hours. The pressence of environmentally friendly FR additive (non-bromine, non-antimony) is required
2.3 Specification for the mosquito net for doors, windows, ventilation openings, and inner tents	
Material, ISO 1833	Polyester 100%, or polyethylene (PE) 100%. Preferably made of 100% recycled material from GRS-certified (or equivalent) sources.
Fabric, ISO 8388	Warp knitted.
Denier	75/100 for the polyester and 100 to 150 for the PE.
Filament	Multi-filament 36 or higher for polyester and Monofilament for PE.
Mesh size	25 holes/cm^2 (156 holes/inch^2)
Weight, ISO 3801	85 g/m^2 minimum.
Shrinkage, ISO 5077	5% maximum.
Bursting strength, ISO 1393-8	250 kPa minimum for polyester and 320 kPa minimum for PE.
Bursting strength after exposure to UV and moisturizing (climatic simulation)	Maximum 30% of strength-loss on minimum required value and maximum 50% strength-loss on original value of the same product. Number of test pieces: three test pieces Exposure in a climatic chamber under ISO 4892-2, type A, 180 hours, followed by bursting test under ISO 1393-8
2.4 Specification for the guying points of the outer tent	
Material composition	Polyethylene/Polypropylene/Polyester ropes. Polyester straps. Steel rings. Elastic device. Preferably made of recycled material, e.g. recycled PE, PP, polyester; recycled steel. Recycled materials should be from certified sources.
Tensile strength, ISO 13934	3000 N minimum for the 6 side points (3 test pieces). 1400 N minimum for the 4 other points (2 test pieces). Elongation of the elastic device under 1000 N: minimum 50 mm, maximum 100 mm. *Testing should be done on samples taking the complete guying point assembly including the entire reinforcement pieces.* **Sample size: W 300 x L 500 mm. Sample to be cut at the centre guy line for the side point (500 mm length is with eave included).* *Samples to be cut on the top corner of the outer doors for the other points.* *Samples to be folded to fit into the traction apparatus with the entire width of the sample being submitted to the traction when clamped in the apparatus jaw. The sample must include: the tent roof, the reinforcement, the strap, the ring, the elastic device, the buckle, the runner and a sufficient part of the guy rope (the ring and the runner do not need to be included in the UV test).* *The traction is applied between the tent roof and the guy rope.*
Resistance to UV	Maximum 30% * of strength loss on minimum required value and maximum 50% strength loss on original value of the same product. 1 test piece at 1400 N 1 test piece at 3000 N. ** In percentage of tensile strength loss after exposure in a climatic chamber under ISO 4892-2, type A, 360 hours.*
Color	Black colour ropes and straps (no additional colour additives required). Galvanized steel.
2.5 Specification for the hammer	
Type	Sledgehammer, 1 kg head, with 30 cm wooden handle. In accordance with ISO15601 and below specification.
Handle	No chip, rough surface, holes, knots. Smooth surface. Dry and strong flexible wood. Handle adjusted to head to protrude on other side of the head and be blocked with a metal wedge or be a conical shape (like hoes). Moisture minimum 10%, maximum 15%, under ISO3130.
2.6 Specification for steel components: poles, pegs pole pin, stakes and pegs	
Material	Galvanized or painted steel. Preferably recycled steel from a certified source.
2.7 Specification for other plastic components, such as rope tensioners, buckles, and hooks	
Material	PE (polyethylene), and/or PET (polyethylene terephthalate), and/or other types of plastic. Preferably made of post-consumer recycled plastics from GRS-certified (or equivalent) source.

3. MAKE-UP OF THE OUTER TENT

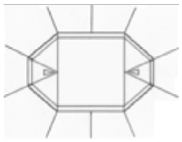
General description of the outer tent	The outer tent is made of several sections which form the general shape of the tent. The seams run from the ridge down to the roof edges, perpendicular to the ridge line. There should be no seams in the central part of the roof (as this can be made from one piece of 4 m wide). To provide additional protection against abrasion a reinforcement panel at the center ridge of the roof may be included. The reinforcement panel shall be a 200 mm wide polyethylene fabric (same as the outer tent material). A 200 mm wide PE fabric should be stitched along the edges where the gable and main roof joins, effectively incorporating the ridge reinforcement into this seam. The outer tent is supported by 3 upright poles +1 ridge beam, 6 side poles and 4 door poles, 3 guy ropes on each side and 2 guy ropes at each end. The attachment points of each guy rope are reinforced. The outer tent is placed over the ridge beam, which is held by 3 upright poles, one at each end of ridge beam, and one at the centre of the ridge beam. The outer tent is maintained in position on the ridge pipe with 2 sleeves of 100 mm long, closed by Velcro on full 100 mm length, one sleeve at each end of the ridge, at 200 mm from the end. The side walls are held by 6 side poles with a metal hook on top to hook into the eyelet of the webbing band (25 mm wide) placed on the inside of the wall top. Side wall poles do not protrude through the outer tent. The hook at the top of the side poles is as flat as possible. The front and back vestibules are held by 2 poles placed at the top corners of the doors. Door poles do not protrude through the outer tent. Poles are as flat as possible. The hook at the top of the door poles is as flat as possible.
Dimensions / erecting system	Centre height: 2.2 m Width: 4 m Ridge length: 4 m Side wall height: 1.25 - 1.40 m Door height: 1.4 m Centre base length: 6.6 m
Reinforcements	The 10 roof guying points are made of 50 mm wide polyester straps, sewn to the eave in extension of the roof. The eave is part of the roof panel. On the 6 side guying points and 4 doors guying points an additional layer of tent material (PE) is added on the inside to protect against abrasion from the top of the pole. In addition, the 6 side and 4 door guy points have a second triangular piece of material of 300 mm side length sewn to the roof, from the edge of the eave.    

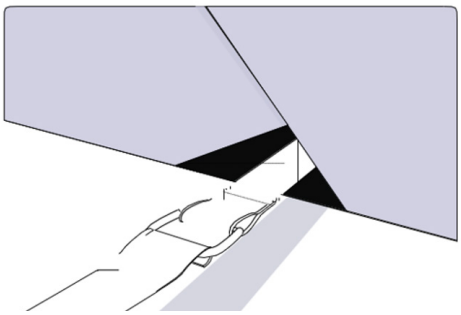
UNHCR
The UN Refugee Agency

FAMILY TENT

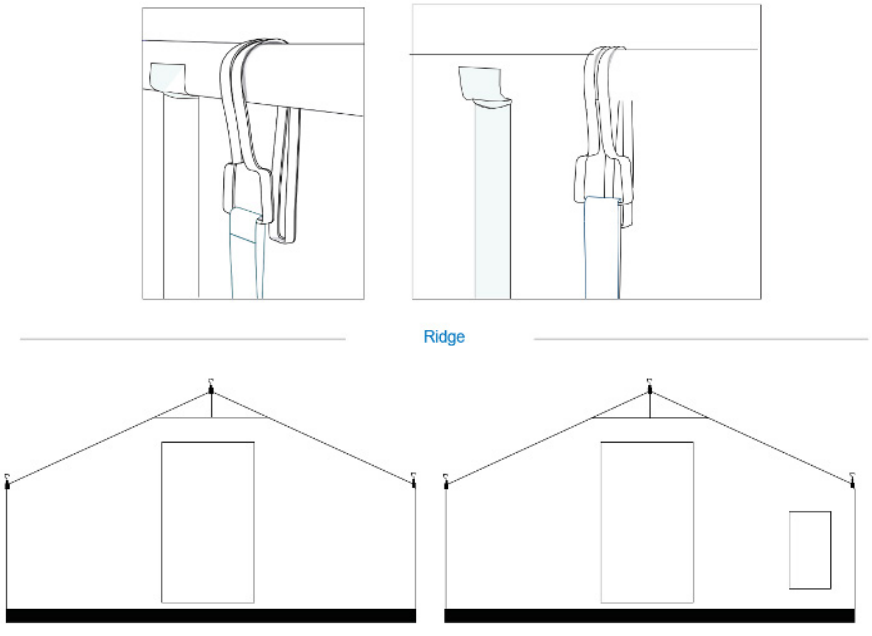
eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Attachment system (guy lines) 	The outer tent is anchored to the ground using 10 guy lines which are attached to 10 metal pegs. Each guying point on both sides presents a loop made of 50 mm wide webbing. The length of the webbing allows, when folded double, the creation of a minimum 30 mm long loop, to be stitched to the tent with a strong Z or X sewing on minimum 50 mm long. The webbings of the guying points at the door poles are longer. The webbing loops are placed perpendicular to the tent edge on the sides, at 30° angle in the corners, and in the alignment of the vestibules roof shape at both ends. 10 metal rings are attached to the loops with an elastic device. The ropes pass into the 10 metal rings. When tensioning, the ropes slide in the metal rings. At the other end, the ropes have a fixed knotted loop to place over the peg. The attachment points are made in such a way that they comply with resistance specified in Section 2.4. The 2 central side webbing loops are sewn perpendicular to the side edges of the tent, the 4 corners webbing loops must make an equal angle with the roof and vestibule edge and the 2 front and 2 rear webbing loops aligned with the vestibule's roof stitching.  
Side windows	The outer tent has 2 long windows with mosquito netting and a rain flap running on both sides of the tent. The inside dimensions of the windows are 3600 mm wide and 600 mm high and the top edge of the window is placed 100 mm below the roof of the tent. The window openings are reinforced with standard netting and strips of 20 mm polyester/polyethylene webbing that reinforce the window horizontally (1 webbing) and vertically (7 webbings). These webbings are sewn to the edges of the tent opening and to the mosquito netting. The window flap is 3960 mm wide x 700 mm high. The flap is stitched 50 mm above the top of the window. The flap is held by 25 mm Velcro webbing which is placed along the length of the vertical sides and bottom and at a 25 mm distance from the window opening. Loops and plastic toggles or hooks are used to keep the flap open when it is rolled up.
Ventilation	The outer tent has minimum 2 ventilation openings in front and back with reinforcement netting and a rain flap. These vents are triangular and are placed at the top of both vestibules. The inside dimensions of the vents are 250 mm wide and 300 mm high. The vent flaps are made in such a way that they are distanced from the ventilation opening when open, making a V-cone shape of 250 mm in its middle. The flap can be closed with a 25 mm Velcro attached to the full width. The vent openings are reinforced either with strong reinforcement netting (large holes strong plastic net), or with standard netting and with two strips of 20 mm polyester/polyethylene webbing that bisects the vent horizontally and vertically. These webbings are sewn to the edges of the vent opening and to the netting.
Outer tent doors	 Door size: W 1.3 x H 1.4 m. Door flap size: W 1.4 x H 1.6 m: Upper part: W 1.4 x H 0.9 m, made of woven PE fabric (same as the main tent material) Lower part: W 1.4 x H 0.7 m, made of woven PE fabric (same as the main tent material). Each door can be closed with a combination of 2 vertically oriented zippers, one on each side, and one of the following backup systems: - **Lacing/loop system**: the loops should be made of 4 mm rope or PE strips (7 loops and eyelets per door side). For each lace/loop system, a toggle or a hook is placed to attach the last loop. The lacing/loop system is protected by a double 50 mm flap to prevent rain and drafts. Each door has one side closable from inside and the other side closable from outside. - **Velcro**; - **Magnets**; **- Side release buckles;** **- A holding system is provided at the top of the door to maintain it rolled up.**
Side walls, vestibule walls, mud flaps	The mud flaps are equipped with 22 eyelets (7 on each side including corners, 2 on each vestibule side), placed on a line reinforced with a full length 50 mm webbing sewn or heat-sealed to the mud flap at floor level, on the inside. Stitch length and thread are appropriate for the materials to prevent tearing of the mud flap along the stitching (not applicable if heat-sealed). The vestibule walls are made in the same way, to complete the outer tent between the doors and the side walls. One of the vestibules carries the chimney hole.

Chimney reinforcement	A chimney reinforcement with a non-perforated opening is placed at 0.5 m from one corner, on one end of the tent, between the corner of one side wall and the corner of one tent door. This is made of heat resistant fabric (minimum 900°C). It is the type of fabric that keeps the fibers tight when cut. The lower edge of the opening is 500 mm above the ground. Inside dimensions: 250 mm x 650 mm The chimney flap is 350 mm wide x 750 mm high. The flap is stitched at the bottom at the lower edge of the chimney opening. The flap is held by 25 mm Velcro webbing which is placed along the entire vertical sides and upper end at a 25 mm distance from the chimney opening. This velcro can be used for attaching the chimney sleeve, an accessory delivered with the heater. The tent fabric is cut away completely at the position of the chimney opening. The edges of the Chimney opening are hemmed stitched to the inside.
Other accessories	Four (4) loops of 30 mm each are placed on the inside of the tent in places where inner tent doors have corresponding toggles, at the top of the inner tent door zips (see inner tent door description). 10 D-rings (25 x 4 mm thickness), inside the outer tent, to allow the inner tent to be hooked to these D-rings (see inner tent description point 4/4): 6 are placed in the webbings at the top of each side-pole's position, 4 are placed in intermediate position. .   6 D-rings placed on 25 mm webbing are sewn at floor level to the mud flap, inside, to hook the inner tent attachment strings.
Plastic for document pouch	On the outside of each left hand vestibule wall there will be a clear plastic document sleeve. The material will be UV-stabilized polyurethane transparent plastic with a minimum thickness of 0.15 mm. The lower edge of the sleeve will be 800 mm above the ground. The sleeve will have an opening on the left side with the other three sides sewn with two rows of stitching to the tent. The inside dimensions of the sleeve after sewing will be 230 mm high and 310 mm wide.

4. MAKE-UP OF THE INNER TENT WITH THE GROUND SHEET

General description of the inner tent	The inner tent is designed in a square shape and is suspended within the outer tent structure. Its dimensions ensure a 10 cm air gap between the inner and outer tents for ventilation. At the base, the inner tent is secured to the outer tent's D-rings using six elastic webbings, each 20 mm wide, equipped with plastic hooks. The inner tent is divided into two equal sections in the shorter transverse direction by a partition made from the same material. The ground sheet (floor) of the inner tent is a bath tub design (made from a continuous piece of material that extends up the sides of the tent walls, resembling the shape of a bathtub) made from woven PE fabric. It is sewn to the inner tent and extends up the sides to ensure waterproofing. To maintain 100% waterproofing, no stitching is allowed at the lower part of the ground sheet. 

UNHCR
The UN Refugee Agency

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

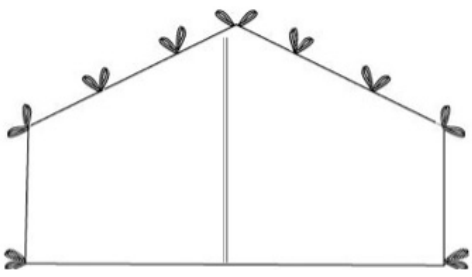
Inner tent dimensions	The inner tent, when hooked to the outer tent has a center height of 2.1 m, a width of 3.8 m, a wall height of 1.15-1.30 m and a base length of 3.95 m.
Inner doors	 Each door opening is 1 m wide and 1.75 m high from the floor (1.55 m measured from the upper edge of the ground sheet). The door panels (1.1 m wide) are placed in the center of the front and rear walls. The doors are made of the same material as the tent and closed with polyester n°10 coil zipper fasteners at the 2 vertical sides. The zipper fasteners can be opened from inside and outside. The doors have a 200 mm PE flap at the bottom, made of the same material as the outer tent. UV stabilized ropes with plastic toggles or hooks are used to keep the door opened when rolled up. Mosquito nets (1.1 m wide) are placed on the inside of the doors. The 2 vertical sides are closed with n°10 polyester coil zipper fasteners. The bottom edge of the mosquito flap closes with one piece of 25 mm Velcro along the entire width. To facilitate the door closing: The 2 elastic webbing loops of 80 mm with toggles or hooks are placed at the top of each door side aligned with the zippers. They attach to the corresponding 3 cm loops available inside the outer tent. The 2 webbing loops with eyelets are placed at the bottom of each door side aligned with the zippers. They are used to attach the tent to the ground with pegs of 6 x 230 mm. The webbing loops are 200 mm long and stitched into the seam where the PE joins the fabric.  
Inner tent suspension system	The inner tent is placed between the 2 end upright poles. It is attached (knotted) to these poles by 2 strings or strips of 25 mm by 200 mm long at each end. The inner tent is suspended from the ridge pipe with 8 galvanized 4 mm wire hooks mounted on 8 webbing loops of 50 mm wide. The total length of the loops including the metal hook is 100 mm. One at each end, two in the centre at 100 mm from the centre pole gap, and the 4 others equally spaced each side. The side walls of the inner tent are hooked with strong plastic or metal hooks mounted on webbing loops to the corresponding D-rings of the outer tent inside, at the top of each side pole and in the intermediate positions. The loops are made of non-elastic 25 mm wide webbing bands and the finished length including the hook is 100 mm. 5 hooks in total per side. The elastic webbing bands for the bottom of the walls are stitched to the tent in the seam where the PE and fabric are joined. The inner tent has 32 loops of 20 mm, made of polyester canvas (same as the inner tent material), for the attachment of the optional inner lining or the optional inner partition. The loops are placed in the inside of the inner tent at every place where the inner tent is attached to the outer tent or to the frame, plus 2 loops at the bottom of each door where the webbings for the ground attachment are placed (8 at the ridge, 5 at the top of each side wall, 3 at the bottom of each side wall, 2 at the base of each door and 4 at the center panel of the roof).

UNHCR
The UN Refugee Agency

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Inner tent ventilation system	The inner tent has minimum 2 triangular vents at each gable top, made of mosquito net and reinforced with 20 mm webbings. The size of the triangle is 750 x 300 mm (all space from the ridge to the top of each door). A ventilation strip may be added on each side of the ridge. Ventilation strips should be made of mosquito netting reinforced with webbings. The ventilation system should close from inside with a flap stitched along the ridge, hanging freely when open, and closing with Velcro on all sides.  
Inner tent windows	The inner tent has 2 windows of same size and same reinforcement, corresponding to the outer tent windows. The flap made of same material as the inner tent is placed inside and opens downwards. It closes with 25 mm Velcro on all sides and hangs freely when open. 
Accessories inside the inner tent	To hang light weight properties, 3 hooks of 20 mm mounted on webbing and 1 pouch of 150 x 200 mm made of netting material sewn on 3 sides are sewn inside the inner tent at the ridge. The pouch hangs from the ridge at the place of the 2nd ridge hook; the 3 hooks are placed at the level of the 3rd, 6th and 7th ridge hooks.
Ground sheet	The integrated ground sheet is made of PE woven fabric (same as outer tent's roof, and walls). The seam that attaches the ground sheet to the sides of the inner tent is 200 mm above the floor. To avoid water infiltration, no stitching seams are allowed in the groundsheet. All the seams are welded by heat sealing and have a 25 mm overlap. A reinforcement patch of 150 x 150 mm of the same material in the centre of the groundsheet are glued or sealed, to avoid the centre pole damaging the groundsheet.
Chimney reinforcement	A chimney reinforcement with non-perforated opening is placed at 0.5 m from one corner, on one end of the tent, between the corner of one side wall and the corner of one tent door. This is made of heat resistant fabric (minimum 900°C). Inside dimensions: W 250 x H 800 mm. The lower edge of the opening is 300 mm above the ground. The tent fabric is to be cut away completely at the position of the chimney opening. The edges of the opening are hemmed stitched.
Inner partition	One partition running from either side of the centre pole to the side walls, constructed from 2 half-partitions, is stitched together at the top. The partition is attached to the loops on the inner tent at the roof and wall levels with 10 pairs of string, and to the centre pole with 2 pairs of string. The partition can be maintained open with 2 additional pair of string.  

5. Poles and accessories

Poles	Each section should be fitted together by a male / female joint of 100 mm made with an inserted pipe point-welded or crimped into one of the pipes (not to be made with press-reduced pipe diameter).
Ridge beam	The ridge beam is 4 m long, with minimum outer diameter of 30 mm galvanized or painted steel pipe, minimum 1.2 mm wall thickness, in 2 pieces. The ends of the ridge beam is reinforced with 2 short pipes of 27.5 mm outer diameter and of 100 mm length, inserted and point welded at both ends of the ridge. The 22.5 mm holes are drilled at 20 mm from both ends for upright poles to fit in. The ends of the ridge beam is protected with a non-sharp, non-cutting plastic cap.
Upright poles	The 2 upright poles are of 2200 mm each (end plug included), with minimum outer diameter of 25 mm, galvanized or painted steel pipe of minimum 1.2 mm wall thickness, comes in one piece. These 2 poles have a narrowed diameter of 21.5 mm by 40 mm long at the top end (end plug included), to insert into the ridge. The top end of these 2 poles have a plastic bushing protruding to protect from the edges of the pipe. The 1 central upright pole is of 2170 mm (size without U-bracket), with minimum outer diameter of 30 mm galvanized or painted steel pipe of minimum 1.2 mm wall thickness, in one piece. This pole comes with a U-shaped metal bracket of 30 mm length. The base of the 2 upright poles has a round metal or plastic base-plate of 50 mm diameter. The base of the central pole has a soft flexible plastic or rubber base plate of minimum 50 mm diameter to protect and avoid damage to the ground sheet while keeping proper stability.
Side poles	The 6 side poles are of 1.25 m, with minimum outer diameter of 19 mm painted or galvanized steel pipes of minimum 1 mm wall thickness, in one piece. Each pole comes with a bended 20 to 30 mm pin on top in form of a flat hook. The 4 door poles are of 1.4 m with minimum outer diameter of 19 mm painted or galvanized steel pipes of minimum 1 mm wall thickness, in one piece. The 4 door poles come with a 50 mm pin at the top. The top of each pole has a bend 20 to 30 mm pin form into a flat hook. Side poles and door poles base plates are made with a round piece of plastic of 40 mm diameter, with a pin of 20 to 30 mm length pointing downward.
Ropes/ loops/ guy runners	The 6 ropes are UV treated, 3 m long each, 8 mm diameter, with a minimum tensile strength of 300 kg. 4 ropes, UV treated, 3 m long each, 6 mm diameter, with a minimum tensile strength of 140 kg. All ropes are passed in the rings of the tent from factory. All ropes have a securely knotted loop at one end, to place over the peg. Guy runners are pre-mounted on the ropes. Guy runners can be made of wood, or of metal. The grain of the wooden runners runs lengthwise in the runner, with no knots. Size of the runners: 100 x 35 x 12mm, the holes are of the same diameter as the ropes and adapted to the good running and blocking of the supplied ropes. The holes are at minimum 15mm from the end of the runner. The ropes are threaded through the runners in the position that represents the maximum blocking position on the ropes as per the photo below.  

FAMILY TENT

eco-design, without UNHCR logos

UNHCR Item No **SH-TE-10028**

Pegs and accessories	The six 400mm-pegs are made of T-shaped iron 25 x 25mm and 3mm thick, with a 75 mm-iron rod 8mm in diameter welded on top. At one end, the peg is cut to form a pointed end. At the other end, the 75mm by 8mm rod is welded to the top. The two corners next to the top rod is cut at 45° and smoothened to avoid injuries. The rod produces a 25mm prominence on each side of the peg. Pegs are painted or galvanized.    The 4 pegs of 300 mm length after bending are made of iron rebar of 10 mm diameter, with a hook bended on one end, “candy cane” shape, or a cross shape, painted or galvanized. The 26 pegs of 230 mm length are made of iron bar of 6 mm diameter, with a round or cross-shaped head on one end, to avoid damaging the mud flap when pushed in the eyelets, painted or galvanized. 1 metal hammer of 1 kg with 300 mm wooden handle. (See specification in part 1).
Fire safety information	Fire safety information is available inside the tent. This is printed with durable print on a piece of an outer tent material and stitched inside the tent next to the chimney protection. Safety instruction tag should include the text in Arabic, English, French, Spanish, and the fire risk sign (as per the graphic reference below).